

Collaboration Matters

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DUNE Collaboration weekly phone call

Our first task: “CD-1-Refresh”

★ Our first steps towards realizing DUNE...

- CD-1-Refresh review
- Later in year CD-2a/CD-3a for conventional facilities at SURF - would allow funds to be committed for excavation
- The “CD-1-Refresh” process is an **essential step**
- **We must get this right despite the limited time**

★ CD-1-R:

- Covers both facility (LBNF) & Experiment
- Exact structure of documentation being discussed

★ Timeline:

- **2 – 3 June**: Director’s Review
- **22 – 23 June**: PAC
- **6 – 8 July**: Full DOE review

**Time is
very short**

CD-1-Refresh: internal milestones

- **18 March** **DUNE Technical Coordinator named ✓**
- **24 March** **Task Forces (TF) conveners named ✓**
- 31 March CD-1 scope
- **15 April** **Draft CDR to be ready for collaboration meeting**
- 16-18 April Collaboration meeting
- 19 April LBNC meeting
- 5 May Complete Draft for final project office reading
- 19 May Complete CDR ready for Director's review posting
- 2-3 June Director's review
- 22-23 June FNAL PAC
- **6-8 July** **CD-1 review**

Setting up the DUNE Task Forces (I)

- **Eleven Task Forces (TF)** subdivided among physics (6), detectors (3), and software (2)
- TF charged with preparing CDR
- TF conveners appointed based on recommendations from Members of the Institution Board (collected until March 18th). TF conveners are technically & regionally balanced.
- Due to short timescale TF build strongly on previous experience/expertise. Primary goal is to implement changes and/or updates, and provide a coherent picture all across, e.g.
 - include any new assumptions presented in the LOI
 - account for any updated timescales and/or scenarios
 - include any changes of scope

DUNE Task Forces - Conveners

- **US** - **non-US**

- **Far Detector:** Jim Stewart, Marco Zito
- **Near Detector / ND Physics:** Raj Gandhi, Roberto Petti, Sanjib Mishra
- **Long-Baseline Oscillation Physics:** Lisa Whitehead, Thomas Patzak
- **Nucleon Decay:** Jon Urheim, Josh Klein
- **Atmospheric Neutrinos:** Hugh Gallagher, Alessandra Tonazzo
- **Supernova Physics:** Kate Scholberg, Ines Gil-Botella
- **Systematics (LBL):** Dan Cherdak, Elisabeth Worcester
- **Beam Requirements:** Alberto Marchionni, Laura Fields
- **DAQ/Online:** Giles Barr, Jacques Marteau
- **Reconstruction:** Andy Blake, Tom Junk
- **Computing Infrastructure:** Brett Viren, Maxim Potekhin

Setting up the DUNE Task Forces (II)

- We have a very strong team of TF conveners.
- Encourage TF-specific phone meetings right away
- Parallel sessions during the General Meeting on April 16-17
- Report during the Plenary session on April 18
- Mailing lists under creation - keep you posted by email

Producing the CDR

- **Proposed CDR structure:**

- High-level documentation with reference to existing and/or annexed material
 - Vol. 1 – Introduction and Executive Summary ~30 pages ?
 - Vol. 2 – Physics (FD+ND) ~50 pages ?
 - Vol. 3 – LBNF ~100 pages ?
 - Vol. 4 – DUNE (FD,ND,protos) ~100 pages ?
 - Comments ?
- Working hard to finalise the structure and provide high-level outlines with rough page count for Vol 2 & 4
- Anne (aheavey@fnal.gov) and Brett (bv@bnl.gov) to support infrastructure for editing (LaTeX)

Mailing lists

- Several mailing lists have been created and are active already
 - dune-collab, dune-fd-xxxx, dune-nd-xxxx, etc...
 - Full list <https://web.fnal.gov/project/LBNF/SitePages/LBNF%20and%20DUNE%20Mailing%20Lists.aspx>
- Managed by Eileen (berman@fnal.gov)
- Please send your requests to Eileen if you would like to request the creation of additional DUNE-related mailing lists - we will consider their creation asap.